PrIMO
Pharmacist-Integrated Medication Treatment for Opioid Use Disorder

Pharmacist-integrated Medication Treatment for Opioid Use Disorder (PrIMO) TOOLKIT, v 2.0

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The **PrIMO Toolkit** is intended **to describe** the pharmacist-integrated model of medication treatment for opioid use disorder (PrIMO) originating at, and first implemented by Penobscot Community Health Care, a Federally Qualified Health Center based in Bangor, Maine.

It is also intended **to be a resource** for the use of clinical site staff to facilitate implementation of, and accelerate competency with, the PrIMO model.

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History of PrIMO

In 2016, key stakeholders at Penobscot Community Health Care (PCHC), a federally qualified health center (FQHC) system in Maine, developed an integrated program to address the increasing deaths from opioid use and opioid use disorder (OUD) in their community, called PrIMO (Pharmacist-integrated Medication Treatment for Opioid Use Disorder).

As PCHC already employed a patient-centered medical home model of care across its primary care sites, it was natural for PCHC to mobilize a care team comprised of primary care providers, mental health providers, practice managers and coordinators, and pharmacists to care for patients with OUD.

PrIMO started at PCHC's Hope House, a psychiatry integrated primary health center for patients experiencing homelessness. Led by psychiatrist Dr. Trip Gardner, the care team expanded their expertise by adding a pharmacist, Dr. Felicity Homsted, to address the needs of the challenging population served by Hope House. By the time they started providing medication treatment for OUD (MOUD) in patients experiencing homelessness, providers and staff were already knowledgeable about, and accepting of, integrated (versus siloed) care. However, even among this group of open-minded providers, there was some apprehension and fear of providing care for people with OUD.

To address diversion concerns (and because the population was homeless and did not have sufficient safe medication storage), the program was set up for daily observed dosing. The pharmacists on the team were key in developing the process to align with state regulations for medication distribution and storage, however, they soon began to offer other expertise and observations that became vital to the collaborative care of each patient. To describe the patient-centered model of care endorsed at PCHC, Dr. Gardner expressed the following:

'Think of each member of the care team as a triangle. When separated, they only know their individual piece (e.g., behavioral health). When they come together, they complete a circle of expertise to support the patient holistically.'

Over time, **knowledge about OUD among care team members grew synergistically** based on the interdisciplinary nature of the care being afforded each patient, member confidence increased, and the program expanded beyond Hope House to other PCHC primary care clinics.

Data Supporting PrIMO's Efficacy

Patient Outcomes

"We went from isolation to communication to collaboration…"
Drs. Gardner and Homsted

PrIMO has shown great promise for improving patient outcomes. Shortly after its launch in 2016 at PCHC, **PrIMO**:

- **INCREASED** capacity to provide MOUD by adding three new sites,
- **INCREASED** the number of buprenorphine waivered providers who were prescribing MOUD,

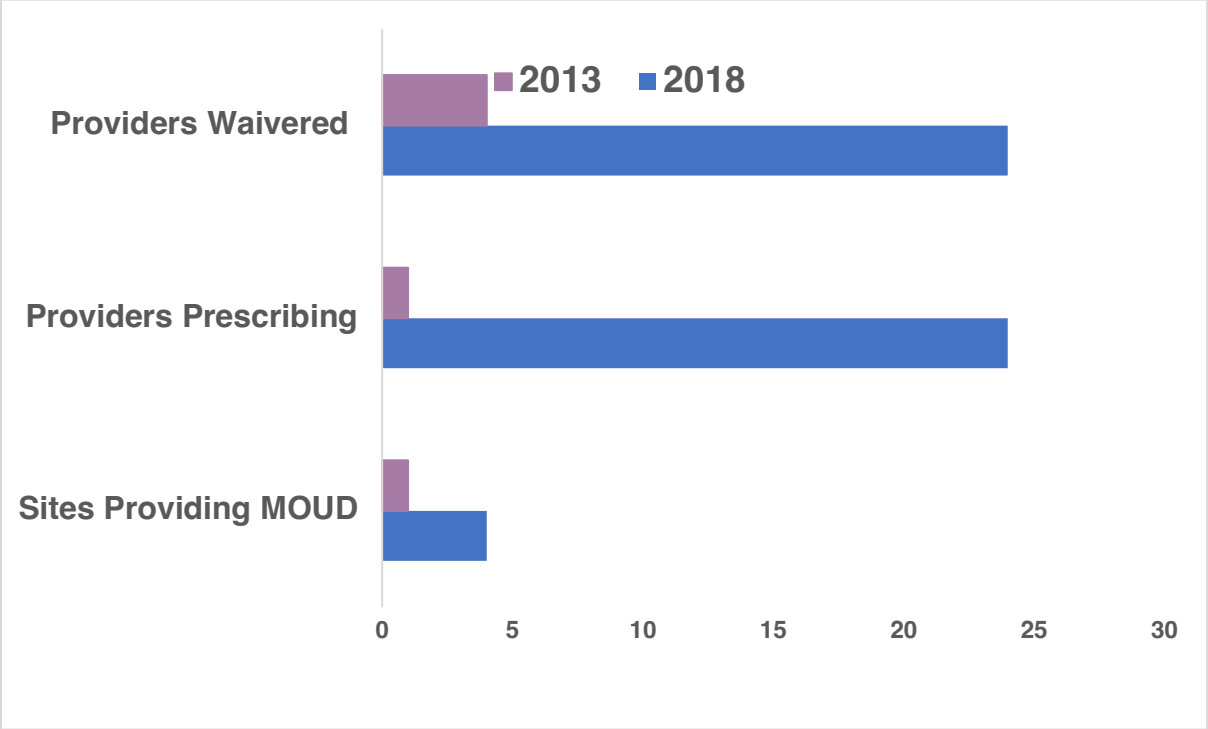
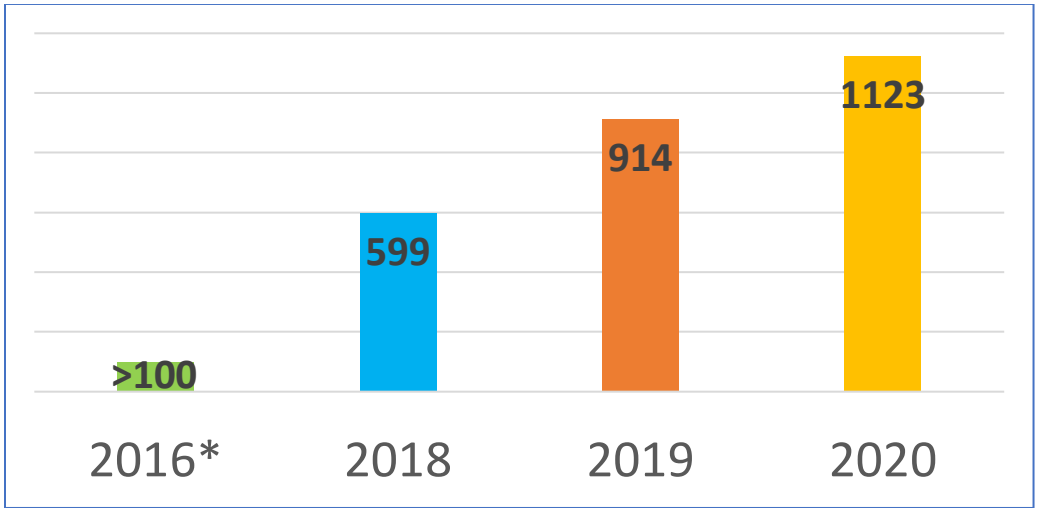


Figure 1. Number of PCHC Sites and Providers Offering MOUD

Table 1. Patient and Provider Measures of PrIMO's Impact		
Outcome of Interest (Organization-wide)	**2013**	**2018**
Number of Sites Providing MOUD	1 site	4 sites
Number of Providers Waivered	4 waivered	24 waivered
Number of Providers Prescribing MOUD	1 prescribing	24 prescribing
Number of Patients on Chronic Opioids	~17,000 patients	~ 400 patients
Number of Patients on Chronic Benzodiazepines	~ 700 patients	~ 200 patients
Morphine Milligram Equivalent (MME)	Daily Average = 290	Daily Average = < 100
Provider Job Satisfaction	3.95/5	4.15/ 5
Voluntary turnover among PAs/NPs	17.5%	10.1%
Voluntary turnover among MDs/Dos	11.1%	6.9%

Figure 2. Number of Patients in Buprenorphine Treatment Across PCHC Sites Over Time Following PrIMO Launch in 2016



*2016 data is an estimated value derived from Drs. Homsted

Data Supporting PrIMO's Efficacy

Provider Outcomes

The growth of the PrIMO model also spurred increased engagement of prescribers and pharmacists in integrated clinical teams for the treatment of OUD. Based on a site-generated survey collected in 2006 and again in 2017, PCHC observed:

- **INCREASED** provider job satisfaction,
- **IMPROVED** pharmacy staffs' attitudes about addiction,
- **DECREASED** voluntary turnover for all provider-level positions, and
- **DECREASED** concerns about delivering MOUD among prescribers in family practice settings who reported that it allowed them to prescribe MOUD instead of referring patients to addiction specialty settings.

Table 2. Change in Clinicians and Services Over Time
(Organization-wide)

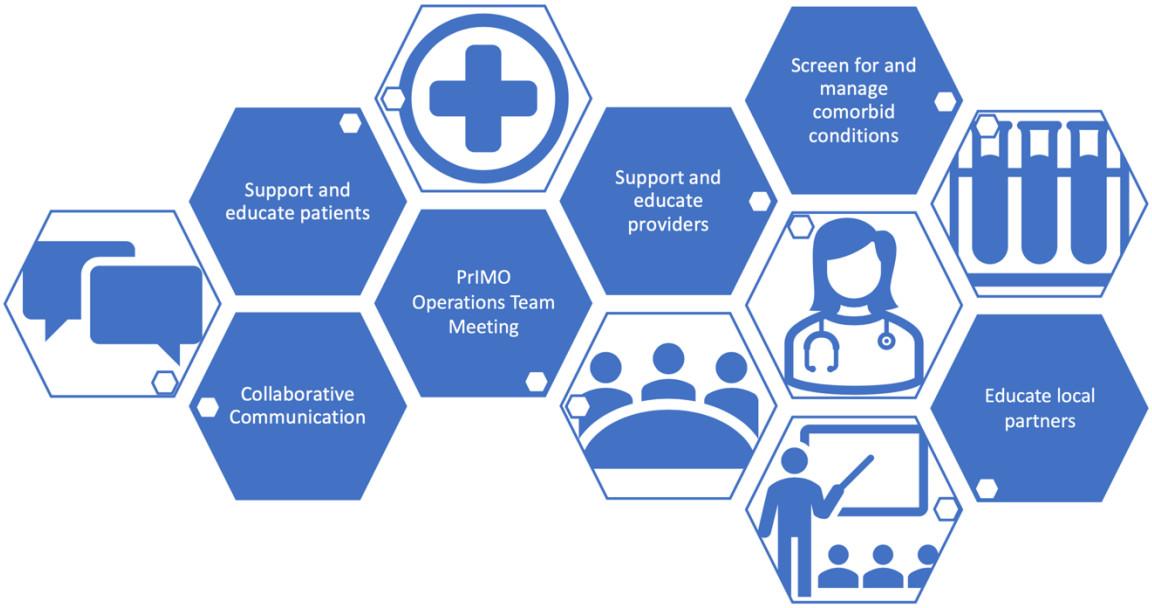
Staffing, Program/Services, and Prescriptions	**2016**	**2018**
Clinic and Retail Pharmacists involved	0	7
Pharmacy Technicians involved	2	18
Prescription Assistance Technicians involved	0	2
Pharmacy Residents	0	7
Collaborative drug therapy management programs	0	2
Integrated Pharmacies	0	4

From 2016-2018, **135** patients received MOUD at Hope House:

- **89** patients received buprenorphine
- **44** patients received extended-release naltrexone (Vivitrol
- **2** patients received both buprenorphine and extended-release naltrexone,
- not simultaneously

*** Note:** PCHC's Controlled Substance Stewardship committee formed around 2013 (pre-PRIMO). Through the committee's work and enhanced subsequently by PrIMO, the number of patients on long-term opioids**,** long-term benzodiazepines, and those on > 100 daily morphine milligram equivalent opioids **DECREASED**.

Core Components of PrIMO



In the PrIMO model, an integrated primary care clinical team, including primary care clinicians, psychiatrists, advance practice providers, behavioral health clinicians, nurses, other MOUD clinic staff, and pharmacy staff, work collaboratively in offering a full continuum of healthcare to people with OUD. **The pharmacy staff's role is not limited to medication preparation and dispensation but includes engagement in all key care team activities as a contributing member of that team**.

- Specifically, the pharmacist(s) meets with patients at the primary care site who are entering into and/or are engaged in OUD care at the site. In this process, they bring their unique in-depth knowledge about MOUD to the primary care setting and provide detailed education to patients about these medications. In so doing, pharmacists help to engage/retain patients in OUD care and, importantly, increase capacity to introduce/continue MOUD in primary care.
- The pharmacists also participate regularly in team clinical meetings ("team huddles") at the clinic as an embedded member of the primary care team. They may also advise on: medication induction to buprenorphine treatment; medication interactions and/or precautions and the medication management of adverse events and withdrawal; insurance coverage, cost associated with medication, coordination of prior authorizations; other chronic disease care (e.g., Hepatitis C co-management, naloxone training; mental health medication co-management; vaccinations; smoking cessation, contraception, STDs).
- Pharmacists may also attend group counseling sessions.

Pharmacists also participate as key members of the care team while at the pharmacy. When patients come to the pharmacy to pick up medications, the pharmacists and pharmacy technicians observe and report to the clinical team on behavioral observations, including progress and communications with patients noted during pharmacy interactions.

- They can reinforce the PrIMO model that is offered in primary care within the context of the pharmacy setting (for full care integration across sites).

- Pharmacists also help monitor patients' medication adherence and patients' labs (e.g., substance use). It is important to note that the intensity of these services is modified based on each patients' level of need (e.g., the full care team will still engage with all patients, but the intensity of services offered to patients is matched to their needs).

- Thus, the PrIMO model is a highly patient-centered model of care.

The PrIMO model consists of six core components that embody one main principle: the pharmacist is a valued member of the clinical care team, supporting both clinical staff members and the patients they all serve.

PrIMO 6 Core Components

01 Collaborative Communication

Regular collaborative communication among all members of the care team is the cornerstone of this integrated model. Clinicians will communicate needs or questions about medications, and pharmacists will communicate new information learned through other touch points of MOUD care (i.e., observations at the pharmacy when a patient picks up medication).

02 PrIMO Operations Team Meeting

At least weekly, the clinical care team providing MOUD at the site will meet to discuss operations of the treatment program, specific patient needs, and clinic or workflow needs related to the PrIMO model.

03 Support & Educate Providers

The pharmacist will help to support and educate providers and other site staff on a variety of topics that fall under their realm of expertise. For example, pharmacists may assist in the induction to MOUD for patients with complex needs, both assisting the provider and clinical team in selecting the appropriate medication, dosing, and ongoing management. Depending on the needs of the site, the pharmacist can also assist with larger educational opportunities.

04 Support & Educate Patients

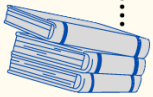
The pharmacist will offer to meet with patients one-on-one to discuss medications, concerns (including insurance coverage and needed prior authorizations), co-management of other health conditions alongside MOUD, and specifics of the medication prescribed. These appointments can occur around MOUD initiation or thereafter, depending on the needs of the patient and input from the care team.

05 Screen for & Manage Comorbid Conditions

The PrIMO team will develop a health screening order that can include blood tests as well as clinical assessments for risk of many health conditions that patients with OUD often comanage. The pharmacist will work to address these comorbid conditions and their associated treatment, preventative measures for at-risk conditions (including immunizations and vaccinations), and coordinate referrals to specialty providers outside of the clinic. The pharmacist will have a large role in managing health screening and coordinating care across other care team members.

06 Educate Local Partners

As integrated MOUD care providers, the PrIMO team at the site will be encouraged to share learning opportunities with other local partners at the clinic and/or within the local community.



Roles and Responsibilities

FACILITATORS

Facilitators of practice change can work internally or externally to the clinic or organization. In this document, we describe external facilitators partnering with internal facilitators to collaborate on the implementation of the PrIMO model.

Internal Facilitator: Internal Facilitators (also called Local Champions, Site Champions) are employed by the clinic and have a keen understanding of the local context in which the model is being implemented. As “insiders” to the organization, they understand the nuances of clinical workflows, can identify key thought leaders/change agents, and have internal credibility as a member of the local team. Internal facilitators serve as leaders of practice change within a setting, forging relationships with local partners, tailoring the model to the site-specific conditions, and building enthusiasm. These individuals may also work closely with external facilitators and serve as a key liaison between the site and external facilitators.

External Facilitator: External facilitators (“coaches”) are content and clinical model experts who are external to the local site. External facilitators bring in-depth knowledge and expertise on the PrIMO model to the site and work closely with champions to educate the team and adapt the model to the site. These individuals bring credibility as experts of their domain and serve as informed mentors to site partners.

PrIMO CARE TEAM

Core Team Members: The core PrIMO team members are those considered essential to deliver the model. These include at least one pharmacist, at least one MOUD prescriber (MD, DO, NP, etc.), and a therapist/counselor who can provide behavioral healthcare to patients. It is strongly encouraged to have more than one prescriber if feasible.

Ancillary Team Members: Ancillary team members are those roles that are not required for model fidelity but can expand services to patients and may be dependent on the structure and services offered at the clinic. These roles include care/case managers (social work), medical assistants, and program managers. Additional roles may also join the team for specific cases based on the needs of the patients, these include dental, cardiology, vocational, pharmacy residents, medical students, among other roles.

Model Fidelity:
PrIMO Fidelity Checklist

Model fidelity, or the extent to which clinical site staff adhere to and embody the core components of the PrIMO model, is monitored through use of the PrIMO Fidelity Checklist.

The Local Champion/Designated PrIMO care team member (pharmacist or PCP) will complete this checklist weekly during the PrIMO Operations Team Meeting with consensus feedback from the group. This checklist is intended to provide a holistic view of program implementation.

The following are the PrIMO Fidelity Checklist sections and brief rationales for their inclusion (See Checklist on following page):

Section 1: Program Utilization

- **Clinical Data** – collecting data on the number of new patients, as well as the number of patients on the waitlist, is designed to help sites track growth of the program as well as monitor unmet community need.

Section 2: PrIMO Fidelity

- **Operations Team Meeting –** as a core component of PrIMO, it is important to monitor whether this meeting is occurring on a weekly basis, and if not, to prompt problem solving among team members about how to ensure its regular occurrence and consistency. Beyond whether the meeting is occurring, staff are prompted to note whether all patients in MOUD care were discussed. Finally, noting the disciplines in attendance will help clinic staff monitor the integrated nature of their implementation of PrIMO.

- **Collaborative Communication Provider Education and Support –** ensuring that communication about patients between the pharmacist and other members of PrIMO care team is occurring is a core component of PrIMO. By gauging the time allocated and whether it was sufficient can help teams prioritize and problem solve. Also, by assessing the extent to which the pharmacist is providing education and support to care team providers, sites implementing PrIMO ensure that the pharmacist's knowledge base is optimized.

- **Patient Education and Support –** assessing the extent to which the pharmacist is meeting individually with patients (in-person, at the pharmacy, telehealth, or phone) in the MOUD program or with patients who want to know more about the MOUD program over the past week is a core component of PrIMO. Further gathering information about the types of education and support that are being provided will enable sites to evaluate progress towards PrIMO competency.

- **Screen and Manage Comorbid Conditions –** as a core component of PrIMO, it is essential for care teams to assess weekly whether any patients in the MOUD program were screened for comorbid conditions and if so whether the care team discussed the results.

- **Local Partner Education** (Administration, Non-Clinical Staff, and Community) – Establishing whether local partner MOUD-related education activities have occurred (formal or informal) is a core component of PrIMO. Further gathering information about the types of education and support that are being provided will enable sites to evaluate progress towards PrIMO competency.

Section 3: Performance Monitoring

- Every 3 months the PrIMO Fidelity Checklist will trigger additional questions related to performance monitoring and feedback. Performance monitoring and feedback are essential components to program evaluation. Several metrics identified to help evaluate PrIMO's efficacy through the implementation of the model include the number of:

  - clinicians who have prescribed buprenorphine for the treatment of OUD in the past 90 days,

  - patients who have been prescribed buprenorphine for OUD in the past 90 days,

  - clinicians who have prescribed naltrexone (including XR-NTX) for OUD in the past 90 days, and

  - patients who have been prescribed naltrexone (including XR-NTX) in the past 90 days.

Sample PrIMO Fidelity Checklist

The Local Champion (pharmacist or PCP) will complete this checklist weekly during the PrIMO Operations Team Meeting with consensus from the group, or every Friday if no meeting occurs. This checklist is intended to provide a holistic view of program implementation.

Meeting Overview:

1. What was the date of the planned PrIMO Operations Team meeting for which you are entering data?
2. Did the planned meeting take place?
3. Was data collected for the meeting and/or week?

SECTION 1: CLINIC DATA

1. Patients starting MOUD with PrIMO this week (includes new and reinitiating):
    a. None
    b. 1-2
    c. 3-5
    d. 6-11
    e. 12-20
    f. 21+
    g. Unknown

2. Number of patients requesting to start MOUD, who were unable to do so this week:
    a. None
    b. 1-2
    c. 3-5
    d. 6-11
    e. 12-20
    f. 21+
    g. Unknown

SECTION 2: MODEL FIDELITY

PrIMO Operations Team Meeting

1. If the meeting did not take place, why not?
    a. No time
    b. Logistical challenges (staffing, space, etc.)
    c. Key personnel not present
    d. No patients
    e. Other, specify:
    f. Unknown

2. Were all the patients seen in the past week reviewed at the meeting?
    a. Yes
    b. No
    c. Meeting did not occur
    d. Unknown

3. If no, *approximately* what proportion of patients were reviewed at the meeting:
    a. Less than 25%
    b. 25% - 49%

c. 50% -74%
d. 75%- 99%
e. Unknown

4. If no, specify reason:
    a. Not enough time (large patient volume)
    b. Not enough time (challenging cases)
    c. Not the right providers present
    d. Unknown

5. Which of the following topics were discussed during the meeting: Check all that apply.
    a. Medication treatment options, dosage, drug interactions, and/or precautions
    b. Evaluate ongoing treatment effectiveness and adverse reactions, non-reassuring behaviors, return to use
    a. Social needs (housing, employment, affordability of medications, transportation, technology, food security, safety,)
    b. MOUD training, including administration techniques and general MOUD education,
    c. Psychotherapy, successes and challenges
    d. Comorbid conditions (e.g., education or general approach to comorbid conditions) including chronic and acute pain, IV antibiotics
    e. Harm reduction strategies (e.g., naloxone education/co-prescribing with MOUD, needle exchanges, safe needle practices).
    f. Meeting did not occur
    g. Other, specify:
    h. Unknown

7. Please select disciplines represented at the meeting. Check all that apply.
    a. Pharmacist
    b. Pharm Resident
    c. Pharmacy Technician
    d. Primary Care Provider (MD, DO, NP, AP)
    e. Primary Care Res
    f. Social Work/Case Management
    g. Psychotherapist
    h. Administrative staff
    i. Other, specify:
    j. Meeting did not occur
    k. Unknown

<u>CRITICAL ACTIONS: 1) The team meeting occurs. 2) Pharmacist is present at the team meeting.</u>

Comments on PrIMO Operations Team Meeting (optional):

Collaborative Communication, Provider Education and Support

2. Did communication between the pharmacist and any other members of the PrIMO team about patients (beyond medication orders) occur over the past week outside of the Operations Team Meeting?
    a. Yes
    b. No
    c. Unknown

3. (If yes, branch here from Q2). How much time was dedicated to this communication (e.g., phone, email, EHR messaging, in person, etc.) between the pharmacist and the rest of the

MOUD team over the past week, outside of the Operations Team Meeting? Choose the answer that best fits the cumulative time spent for the whole PrIMO team (approximations are acceptable).

a. None
b. Less than one hour
c. 1-4 hours
d. 5-8 hours
e. Greater than 8 hours
f. Unknown

4. Was time for communication outside of the meeting sufficient?
    a. Yes
    b. No
    c. Unknown

5. What type of education and/or support was provided by the pharmacist to the providers? Check all that apply.
    a. Medication treatment options, dosage, drug interactions, and/or precautions
    b. Evaluate ongoing treatment effectiveness and adverse reactions, non-reassuring behaviors, return to use
    c. Social needs (housing, employment, affordability of medications, transportation, technology, food security, safety,)
    d. MOUD training, including administration techniques and general MOUD education
    e. Chronic and acute pain patients
    f. Psychotherapy, successes and challenges
    g. Comorbid conditions (e.g., education or general approach to comorbid conditions) including chronic and acute pain, IV antibiotics
    h. Harm reduction strategies (e.g., naloxone education/co-prescribing with MOUD, needle exchanges, safe needle practices).
    i. Other, specify:
    j. Unknown

<u>CRITICAL ACTION: Did the pharmacist contribute to collaborative communication in this week? Did the pharmacist contribute to education and support with members of the clinical team in this week?</u>

Comments on Collaborative Communication, Provider Education and Support (optional):

Patient Education and Support

6. Has the pharmacist met individually with patients (in-person, at the pharmacy, telehealth, or phone) in the MOUD program or with patients who want to know more about the MOUD program over the past week?
    a. Yes
    b. No
    c. Offered, but patient(s) refused
    d. Unknown

7. If yes, what education/support was provided to the patients?
    a. Education about medication treatment options, dosage, drug interactions, and/or precautions
    b. Discuss programs to help patient afford treatment
    c. Evaluate ongoing treatment effectiveness and adverse reactions, non-reassuring behaviors, return to use

d. Results of comorbid screening and associated treatment plans (e.g., education or general approach to comorbid conditions) including chronic and acute pain, IV antibiotics
e. Address patient-specific questions
f. Assess barriers to care and social needs (housing, transportation, criminal justice, employment, childcare)
g. Other, specify:
h. Unknown

8. How often were these meetings part of collaborative care where the MOUD prescriber joined for at least part of the appointment?
    a. All of the time
    b. Most of the time
    c. Some of the time
    d. None of the time
    e. Unknown

CRITICAL ACTION: Did the pharmacist meet individually with patients (in-person, at the pharmacy, telehealth, or phone) in this past week?

Comments on Patient Education and Support (optional):

Screen and Manage Comorbid Conditions

9. Were any patients in the MOUD program screened for comorbid conditions over the past week?
    a. Yes
    b. No
    c. Unknown

10. Did the care team review and discuss results of comorbid conditions of patients on the panel at the PrIMO Operations Team Meeting over the past week?
    a. Yes
    b. No
    c. Unknown

11. If yes, select all that apply:
    a. HIV and PrEP
    b. HCV
    c. STDs
    d. Psychiatric comorbidities
    e. Chronic non-cancer pain
    f. Co-occurring substance use (including alcohol, tobacco, marijuana)
    g. Infections related to injection drug use
    h. Vaccination status
    i. Contraception
    j. Pregnancy
    k. Other, specify:
    l. Unknown

Comments for Comorbid Condition (optional):

CRITICAL ACTION: Management of comorbid conditions will occur weekly.

Stakeholder Education (Administrators, non-clinical staff and community)

12. Did any (formal or informal) MOUD-related education activities occur in the past week?
    a. Yes
    b. No
    c. Unknown

13. If yes, what educational topics were discussed in the past week?
    a. Stigma related to MOUD
    b. Harm reduction resources
    c. Naloxone access
    d. MOUD regulations and policy
    e. Public health trends in the community
    f. Addiction as a brain disease
    g. Success stories of recovery
    h. Patient-provider interactions
    i. Business of medicine (reimbursement, workflows, staffing, medication ordering, stocking, space for patient visits,)
    j. Comorbid conditions
    k. Social needs (housing, employment)
    l. Dosage, drug interactions, and/or precautions
    m. Other, specify
    n. Unknown

14. Please indicate the format of the educational activities in the past week. Check all that apply.
    a. Resources distributed
    b. Internal presentation
    c. External advocacy
    d. Education delivered at regular meeting
    e. Education delivered during brief impromptu conversation
    f. Planning discussion for upcoming educational activities
    g. Other, specify
    h. Unknown

Comments on Stakeholder Education (optional):

CRITICAL ACTION: Stakeholder education is discussed weekly.

SECTION 3: PERFORMANCE MONITORING AND FEEDBACK
This section will populate every 90 days post PrIMO model launch.

Instructions: Please enter the data currently available in your clinic's Performance Monitoring and Feedback Dashboard.

1. How many providers prescribed buprenorphine for the treatment of OUD in the past 90 days?

2. How many patients have been prescribed buprenorphine for OUD in the past 90 days?

    a. Of these, how many initiated buprenorphine treatment at this clinic in the past 90 days?

3. Average number of patients receiving MOUD per prescribing clinician.

4. How many clinicians prescribed naltrexone (including extended-release naltrexone) for OUD in the past 90 days?

5. How many patients have been prescribed naltrexone (including XR-NTX) for OUD in the past 90 days?

    a. Of these, how many initiated naltrexone treatment at this clinic in the past 90 days?

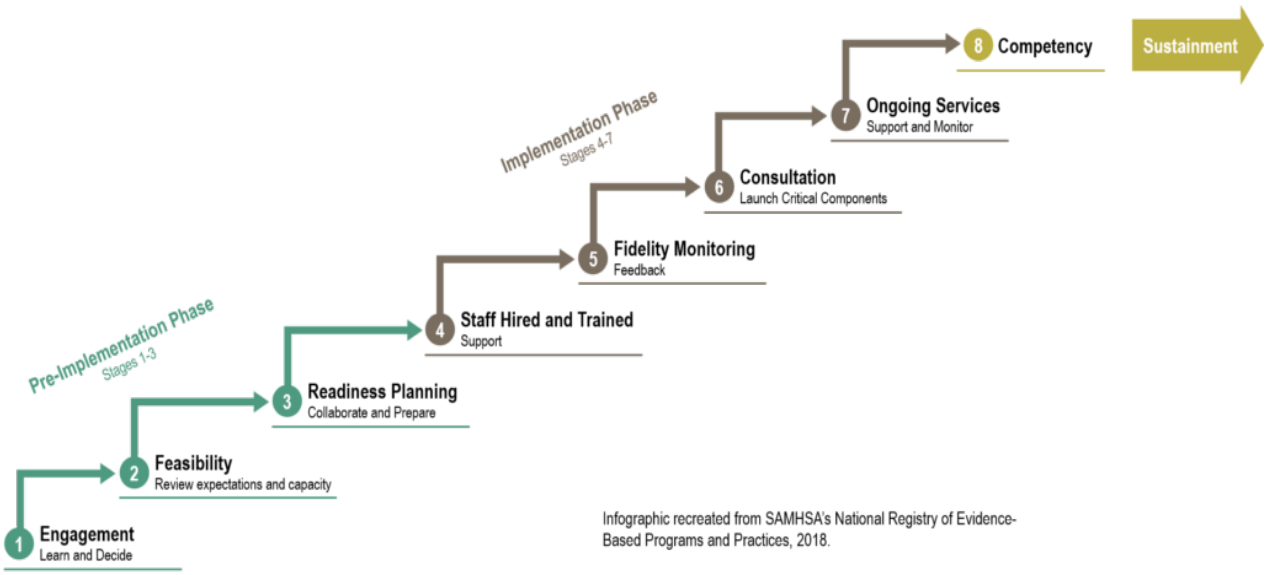
6. How many clinicians have participated in the Learning Collaborative in the past 90 days?

7. How many providers have been provided with academic detailing in the last 90 days?

Model Implementation Stages

Implementation of new practices, innovations, and/or models involves well defined stages or steps. These stages do not necessarily have to be linear, or happen in a particular order, however they do impact each other in important ways.

Knowledge about the typical progression through the arc of implementation – stages and suggested activities associated with individual stages - may increase the likelihood that a clinical site will be successful in its effort to implement PrIMO.



Infographic recreated from SAMHSA's National Registry of Evidence-Based Programs and Practices, 2018.

Stage	Sample Activities
1: Engagement	Site is informed that services/program is available + site confirms interest in implementing PrIMO
2: Consideration of feasibility	Pre-implementation planning + feasibility assessment (concrete expectations, e.g., population to be served, are outlined).
3: Readiness planning	Cost is evaluated + early meetings with program champions, leadership, care team members occur+ roles are discussed
4: Staff hired and trained	If needed, pharmacist hired or assigned + prescriber hired or assigned + clinic staff member identified to coordinated day-to-day operations of PrIMO

5: Adherence monitoring processes in place	Clinical team trained on PrIMO Model Fidelity Checklist + clinical site operationalizes quality improvement tracking processes, (e.g., report card) to monitor the # of patients with OUD who received MOUD prescriptions in the past month.
6: Services/ consultation begins	1st Operations Meeting occurs using a patient roster + PrIMO Team prepares for appointments with patients in MOUD for the coming week.
7: Ensuring fidelity, staff competence and adherence	Clinical site reviews progress and implementation to date – all stakeholder meetings.
8: Site competency	Date the EFs determine the site is competent in PrIMO.
**Not all stage activities are necessarily completed and are not necessarily completed in a linear fashion.*	

How PrIMO Improves OUD Care for Patients and the Care Team: Example Benefits

The following are some examples from the experiences of others who implemented PrIMO originally at PCHC in Maine. They are intended to spark creativity and collaboration in terms of how PrIMO might improve care at your site.

These are only a few examples. The possibilities for improving OUD care are unlimited when care team members *work together fearlessly* in the service of their patients.

Collaborative Communication

- Through their participation on the clinical team and education about addiction, the pharmacist can identify behavioral symptoms of addiction seen at the pharmacy window.

- These behaviors are brought back to the team as symptoms of addiction and the team can develop a treatment plan including the pharmacist around addressing symptoms of addiction resulting in improvement in symptoms and continuing in recovery.

- Outside of PrIMO, these behaviors may result in the patient no longer being allowed to be served and may reinforce stigma.

MOUD Program Operations Meetings

The pharmacist improves workflow and anti-stigmatizing messaging regarding dosing.

- At PCHC, for example, the daily dose program initially was transporting patients together in a van to receive their dose each day at the pharmacy. The pharmacist pointed out to the team that this was difficult for workflow for the people working in the pharmacy and the clinical staff at the health center.

- It was also thought by the pharmacist that the workflow created stigma within the pharmacy as other pharmacy customers and the pharmacy staff saw the group come in a van every morning which gave the message that these patients and this condition being treated was not the same as other medical conditions.

- The pharmacy, clinical staff, and administration worked to overcome barriers and develop a flow where the medications could be delivered daily to the health

center which resulted in an increase in efficiency for the patients as well as the health center staff and did not reinforce the previous stigmatizing messaging.

In another example from weekly care team meetings, the pharmacist was able to explain unexpected findings on urinary drug screens leading to improved care of the patients. On several occasions, this function included the pharmacist calling the toxicologist to get an individualized explanation regarding the unexpected findings which was brought back to the team utilizing language that the team could understand which enhanced the patient-centered response to improve OUD outcomes.

Support and Educate Providers

- Hesitant PCPs, despite months of encouragement and education from administration as well as colleagues, met with the pharmacist to review concerns, be educated on risks and benefits of buprenorphine, and receive personalized support.

- The result was that many primary care providers began thinking of addiction as any other chronic medical condition and began prescribing MOUD.

- The pharmacist was able to educate the administration and the healthcare providers regarding the cost of various buprenorphine formulations that led to a cost-savings for patients and the health center.

Support and Educate Patients

Pharmacists have a wealth of knowledge to contribute to the collaborative care of patients receiving MOUD. Topic areas include medication dosage, administration, potential adverse drug reactions, how the medication works, drug interactions as well as expected cost and various programs to help patients afford treatment (e.g., Sliding scale, prescription assistance programs, copay assistance programs). The following is one example of a drug administration issue handled by the pharmacist:

- The pharmacist can deliver patient-centered education regarding buprenorphine.

- For example, a patient was getting inconsistent coverage from the same dose of buprenorphine day to day. In meeting with the patient, the pharmacist was able to find out that the patient was not allowing the medication film to absorb fully and was swallowing it.

- The patient allowed the medication to absorb fully, and levels of coverage became consistent going forward.

Screen for and Manage Comorbid Conditions

There are many comorbid conditions commonly experienced by patients in MOUD care. These include HIV, HCV, STDs, psychiatric comorbidities, chronic non-cancer pain, and co-occurring other substance use (e.g., tobacco, alcohol, marijuana) that could be swapped for Hepatitis-C in the below example. Notably, the pharmacist in the first PrIMO experience in Maine, played a key role in developing the health screening order set for all patients entering MOUD care. The following is one example of the interlocking nature of the care for OUD and other comorbid conditions.

- During weekly meeting reviews, the pharmacist was able to uncover the lack of screening and treatment for hepatitis-C in many cases.
- These discoveries raised the team's awareness of this need.
- The pharmacist was then able to help the patients obtain hepatitis-C treatment in the pharmacist hepatitis collaborative care program with successful outcomes and progression in recovery as the patients were motivated by their healthy self-care to further their recovery.

Educate Local Partners

The pharmacists and other PrIMO team members participated in multiple community and health center endeavors to educate on addiction, the value of MOUD, and responsible prescribing of opioids and benzodiazepines. These endeavors included:

- Answering questions as they occur from the community/healthcare providers/healthcare administrators
- Teaching students and residents
- Presentations about addiction and OUD to the community/healthcare providers/healthcare administrators
- Service on community and state tasks forces to improve the system of treatment for OUD, and
- Participating in the weekly Controlled Substance Stewardship committee to promote the responsible prescribing of benzodiazepines and opioids

For example, the prescriptions of chronic opioids and benzodiazepines were reduced by 70% throughout the health center and a community work group was established to promote the same practices at other health centers.

PrIMO Resources

Addiction
Drugs, Brains, and Behavior: The Science of Addiction

- https://nida.nih.gov/publications/drugs-brains-behavior-science-addiction/drugs-brain

Neurobiologic Advances from the Brain Disease Model of Addiction

- https://www.ncbi.nlm.nih.gov/pmc/articles/PMC6135257/

Opioid Use Disorder
Assessing and Addressing Opioid Use Disorder

- https://www.cdc.gov/drugoverdose/training/oud/accessible/index.html

Medications for Opioid Use Disorder (MOUD)
Medication for Opioid Use Disorder Saves Lives

- https://www.nap.edu/catalog/25310/medications-for-opioid-use-disorder-save-lives

PCSS Overview of Medications for Opioid Use Disorder
- https://pcssnow.org/medications-for-opioid-use-disorder/

Guidelines for the Treatment of Opioid Use Disorder
ASAM National Practice Guideline developed for the treatment of opioid use disorder and the prevention of opioid overdose-related deaths:

- https://www.asam.org/quality-care/clinical-guidelines/national-practice-guideline

SAMHSA Buprenorphine Quick Start Guide:

- https://www.samhsa.gov/sites/default/files/quick-start-guide.pdf

Opioid Addiction and Treatment Resource

- https://www.opiateaddictionresource.com/treatment/suboxone_treatment_directory/

The Medication Access and Training Expansion (MATE) Act

- **https://accme.org/mate-act**

Addiction Education for DEA Requirements

- https://www.asam.org/education/dea-education-requirements
- https://medicine.yale.edu/intmed/genmed/addictionmedicine/education/addiction-pain-cme-trainings/

Substance Use Related Stigma

Stigma in health facilities: why it matters and how we can change it

- https://bmcmedicine.biomedcentral.com/track/pdf/10.1186/s12916-019-1256-2.pdf

Words Matter - Terms to Use and Avoid When Talking About Addiction (NIDA)

- https://nida.nih.gov/nidamed-medical-health-professionals/health-professions-education/words-matter-terms-to-use-avoid-when-talking-about-addiction

Language Matters to the American Medical Association (AMA)

- https://end-overdose-epidemic.org/wp-content/uploads/2020/07/Language-Matters_Template-1.pdf

Preferred Terms for Select Population Groups & Communities (CDC)

- https://www.cdc.gov/healthcommunication/Preferred_Terms.html

PrIMO Expert Contact Information

Please feel free to email expert contacts if you have questions about PrIMO, implementation of PrIMO, or related topics that are not answered in this toolkit. Experts will return your email as they are able.

When emailing experts, please also copy the CTN-0116 email address (CTN-0116@dartmouth.edu) as well to ensure timely follow-up to inquiries.

Dr. Felicity Homsted * **(PharmD, MBA) –** felicity@fqhc340b.com

Dr. Trip Gardner * **(MD, Psychiatry) –** trip.gardner@dartmouth.edu

Dr. David Fiellin (MD, primary care and addiction) - david.fiellin@yale.edu

Dr. Paul Joudrey (MD, MPH, primary care and addiction) - pjoudrey@pitt.edu

Dr. Lisa Marsch (PhD, technology and behavioral health) – lisa.a.marsch@dartmouth.edu

Dr. Lisa Saldana (PhD, implementation science, SIC developer) - lisas@oslc.org

CTN-0116 – CTN-0116@dartmouth.edu

*Co-Creators of PrIMO

Communicating about PrIMO

Pharmacist-Integrated Medication Treatment for Opioid Use Disorder (PrIMO)

A brief guide for Pharmacists and Clinicians

How can a pharmacist help to adopt treatment of opioid use disorder (OUD)?

We cannot end the opioid epidemic without collaborative care.

Pharmacists remain an underutilized resource.[1]

Benefits of pharmacist engagement include:

- clinician time may be saved
- access to care is expanded
- clinical outcomes may be improved
- costs are reduced [2,3]

What is the PrIMO model?

The PrIMO model consists of Six Core Components that embody one main principle: **the pharmacist is a valued member of the care team, supporting both clinical staff members and the patients they all serve**.

"Think of each member of the care team as a triangle. When separated, they only know their individual piece (i.e., pharmacy, mental health). When the triangles come together, it forms a circle with each apex coming together to represent/support the patient as a whole."

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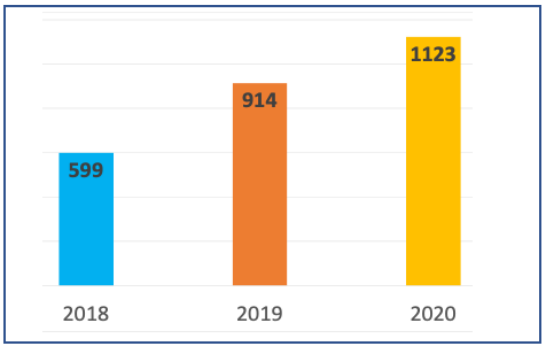
Number of patients in buprenorphine treatment across PCHC sites over time after PrIMO was initiated in 2016



Find out more, contact:
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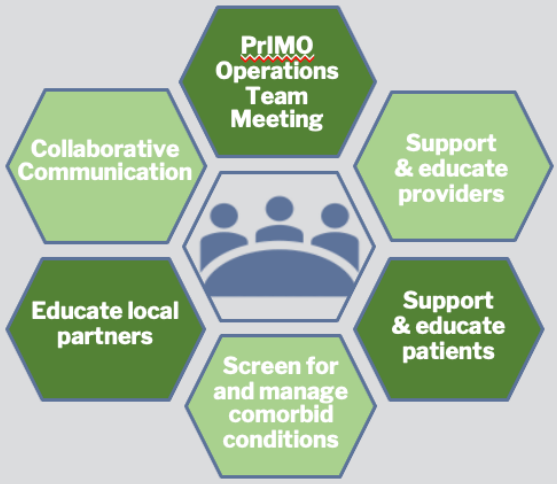
Does PrIMO work?

When PrIMO was originally implemented at a Federally Qualified Health Center (FQHC), Penobscot Community Health Care in Maine:

- ✓ The number of prescribers for medications for opioid use disorder (MOUD) **increased from 4 to 24** from 2013-2017.
- ✓ **Staff's attitudes** about addiction improved.
- ✓ **Prescriber concerns** about delivering medication treatment for OUD were reduced.
- ✓ **PCPs began providing MOUD** on site.
- ✓ Given success, this model was implemented in **two additional PCHC health centers**.

What are the Six Core Components of PrIMO?



What if all patients with OUD received collaborative care?

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1. In: Adams K, Corrigan JM, editors. Priority Areas for National Action: Transforming Health Care Quality. Washington (DC) 2003.
2. Giberson S, Yoder S, Lee MP. Improving Patient and Health System Outcomes through Advanced Pharmacy Practice. A Report to the U.S. Surgeon General. Office of the Chief Pharmacist. U.S. Public Health Service. Dec 2011.
3. Merrill BS, Tak CR, Feehan M, Munger MA. Payers' Perspectives on Pharmacist-Directed Care in a Community Pharmacy Setting. Ann Pharmacother. 2019;53(9):916-21. Epub 2019/03/22. doi: 10.1177/1060028019839440.

What can I do as a Pharmacist or Clinician?

Assess for Opioid Use Disorder

Questions for Identification of OUD based on DSM-5

Loss of Control

- ❑ Have you found that when you started using, you ended up taking more than you intended to?
- ❑ Have you wanted to stop or cut down on using opioids?
- ❑ Have you spent a lot of time getting or using opioids?
- ❑ Have you had a strong desire or urge to use opioids
- ❑ Have you missed work or school or often arrived late because you were intoxicated, high or recovering from the night before?
- ❑ Has your use of opioids caused problems with other people such as with family members, friends or people at work?
- ❑ Have you had to give up or spend less time working, enjoying hobbies, or being with others because of your
- ❑ Have you ever gotten high before doing something that requires coordination or concentration like driving, boating, climbing a ladder, or operating heavy machinery?
- ❑ Have you continued to use even though you knew that the drug caused you problems like making you depressed, anxious, agitated or irritable?
- ❑ Have you found you needed to use much more drug to get the same effect that you did when you first started taking it?
- ❑ When you reduced or stopped using, did you have withdrawal symptoms or felt sick when you cut down or stopped using?

Moderate Opioid Use Disorder: 4-5 symptoms, Severe Opioid Use Disorder: 6 or more symptoms

Increase access to medication treatments

- ❑ Initiating buprenorphine or naltrexone and referral for methadone

Offer harm reduction strategies

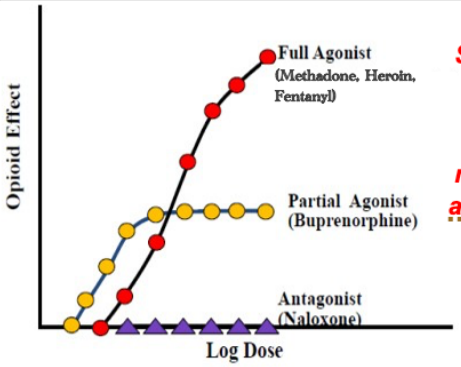
- ❑ Overdose prevention education and training
- ❑ Provide naloxone by prescription, including pharmacy-initiation

Want to learn more?
https://www.asam.org/education/dea-education-requirements

Prescribe MOUD [4,5]

- All medications below have been FDA approved to treat OUD.
- Long term treatment with MOUD improves retention, and decreases opioid use, HIV, HCV, and overdose.

Medication	Dosage	Notes
Partial Opioid Agonist		
Buprenorphine/ Naloxone (Suboxone, Bunavail, Zubsolv)	2-24 mg daily of tablet or sublingual formulation	Ceiling effect: Potentially less overdose risk as compared to fullagonist
Buprenorphine (Sublocade)	Approved injectable formulations	
Full Opioid Antagonist		
Extended Release, IM (Vivitrol)	Injectable IM 380 mg monthly	Requires a short period of abstinence prior to initiation (up to 7 days)
Naltrexone, Oral (Revia)	50 mg daily	
Full Opioid Agonist		
Methadone, Oral	20-120 mg daily Higher doses as indicated in special circumstances	Not currently legal to prescribe for OUD in office settings.



Successful patients often receive medication as long as it provides benefit.

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4. Lim JK et al. Prescribe to Prevent, Overdose Prevention and Naloxone Rescue Kits for Prescribers and Pharmacists. J Addict Med. 2016
5. Volkow, ND, and Collins, FS. The Role of Science in Addressing the Opioid Crisis. N Engl J Med 2017; 377:391-394 July 27, 2017

Pharmacist-Integrated Medication Treatment for Opioid Use Disorder (PrIMO)

A brief guide for healthcare workers

PrIMO

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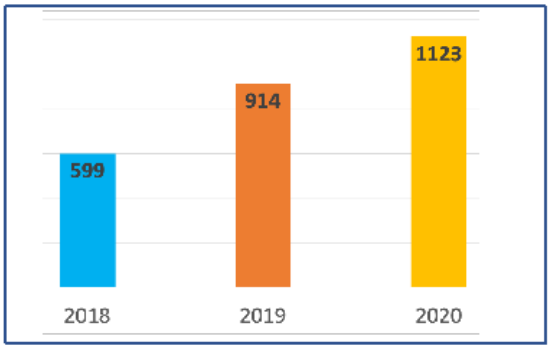

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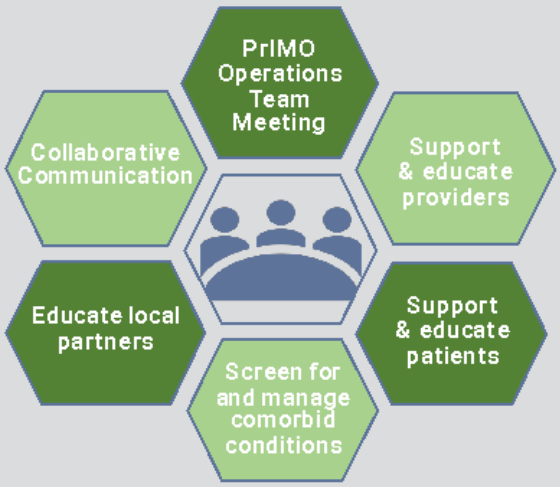

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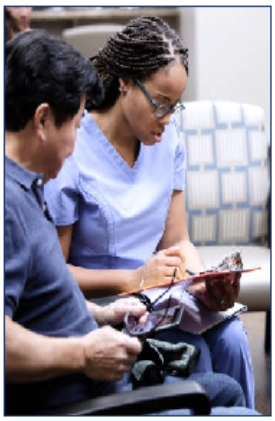
What can I do as a member of the healthcare team?

Words Matter[4]

- Opioid use disorder is a treatable, chronic medical disease from which patients can achieve remission.
- Using person-first language reinforces that patients are more than their disease.
- Patients are **people with an opioid use disorder (OUD)**, people with a substance use disorder, or people with a chronic disease.
- Use clinically accurate terminology, as you would for other medical conditions



Terms to Avoid and Terms to Use[5]

Instead of…	Use
Addict	Person with substance use disorder
Clean	Expected results, not using drugs
Dirty	Unexpected results, using drugs
Medication-Assisted Treatment (MAT)	Medication for Opioid Use Disorder (MOUD)
Habit	Substance use

Contact your PrIMO Care team to learn more or get involved!

Medications for Opioid Use Disorder (MOUD) Work[5]

There is strong evidence of the effectiveness of MOUD in reducing illicit opioid use.

- Long term treatment with medication for OUD improves retention, and decreases opioid use, HIV, HCV, and overdose.
- Successful patients often receive medication as long as it provides benefit.

FDA-approved medications for OUD include buprenorphine, methadone, and naltrexone. These medications work by[6]:

- Blunting or blocking the effects of illicit opioids
- Reducing or eliminating cravings to use opioids
- Reducing or eliminating withdrawal symptoms (methadone, buprenorphine only).
- Saving lives

Methadone and buprenorphine are more cost effective than OUD treatment without medication

As a frontline healthcare worker, **YOU are key to the success of PrIMO.** Thank you for your service.

4. Words matter - terms to use and avoid when talking about addiction. National Institutes of Health. https://nida.nih.gov/nidamed-medical-health-professionals/health-professions-education/words-matter-terms-to-use-avoid-when-talking-about-addiction. January 19, 2022.
5. Volkow, ND, and Collins, FS. The Role of Science in Addressing the Opioid Crisis. N Engl J Med 2017; 377:391-394 July 27, 2017
6. TIP 63 Medications for Opioid Use Disorder Substance Abuse and Mental Health Services Administration (SAMHSA).2021.